



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,793	03/15/2002	Ibrahim Katampe	434576-382	3062
1333	7590	05/20/2004	EXAMINER	
PATENT LEGAL STAFF EASTMAN KODAK COMPANY 343 STATE STREET ROCHESTER, NY 14650-2201			THORNTON, YVETTE C	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/099,793	KATAMPE ET AL.	
	Examiner	Art Unit	
	Yvette C. Thornton	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is written in reference to application number 10/099793 filed on March 15, 2002 and published as US 2003/0175612 A1 on September 18, 2003.

Response to Amendment

1. The amendment to specification is sufficient to overcome the objection to the specification set forth in the previous action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being obvious over Polykarpov et al. (US 6,080,530 A) in view of Orr et al. (US 4,879,287 A) and Stead et al. (US 5,496,891 A). Polykarpov teaches an imaging system is encapsulating to form microcapsules. The said imaging system comprises a photosensitive composition and a chromogenic material. The said composition includes a photoinitiator and a substance, which undergoes a change in viscosity upon exposure to light in the presence of the photoinitiator. Typically the photosensitive composition is a free radical addition polymerization or crosslinkable composition. That substance may be a monomer, dimer, or oligomer, which is polymerized to a higher weight compound, or it may be a polymer, which is crosslinked. The most typical

Art Unit: 1752

example of the said compound is an ethylenically unsaturated compound (c. 3, l. 63-c.4, l. 30). This teaching meets the limitations of instant claims 11 and 12. The said chromogenic material is colorless electron donating type dry precursor compounds which react with a developer compound to generate a dye (c. 4, l. 31-c.5, l. 8). This teaching meets the limitation of a color former as set forth in instant claim 20). The internal phase may also include a carrier oil to affect and control the tonal quality of the images obtained (c. 5, l. 26-51). The internal phase is encapsulated in a urea-formaldehyde wall-former and more particularly, a urea-resorcinol-formaldehyde wall former in which resorcinol has been added to the wall former to enhance its oleophilicity. Other hydrophilic wall forming materials include gelatin, gum arabic and melamine-formaldehyde and hydroxypropyl cellulose. Particularly preferred encapsulation systems include pectin and sulfonated polystyrene as system modifiers (c. 8, l. 4-27). The mean size of the capsules may vary over a broad range but generally ranges from approximately 1-25 microns, preferably 1-10 microns (c. 8, l. 38-48). This teaching meets the limitations of instant claims 8-10. The imaging system maybe embodied in a sealed self-contained imaging system where the imaging system is sealed between two supports and a subbing layer is provided between one of the supports and the imaging layer and an adhesive layer is provided between the other support and the imaging layer (c. 8, l. 60-c. 9, l. 22). It is the examiner's position the when the taught imaging system is deposited on two supports the limitations of instant claims 14 and 15 are met wherein the second support serves as both a protective layer and a second support.

4. Example 1 exemplifies a microencapsulation process wherein the capsule is prepared with polyvinylbenzenesulfonic acid (VERSA), pectin (polygalacturonic acid methyl ester) and

Art Unit: 1752

melamine-formaldehyde. Three different internal phase compositions are used. Each photopolymerization compositions comprises an ethylenically unsaturated compound (TMPTA), a photoinitiator and color formers (yellow, magenta and cyan, respectively) (c. 10, l. 40-c. 12, l. 13).

5. Polykarpov teaches all the limitations of the instant claims except the use of a carboxyvinyl polymer in the aqueous phase as set forth in the instant claims. Polykarpov does however teach that particularly preferred encapsulation systems include pectin and sulfonated polystyrene as system modifiers (c. 8, l. 4-27). System modifiers are well known in the art. Their selection depends on the type of microencapsulation process used and the nature of the wall formers. Therefore, one of ordinary skill in the art would have been motivated to use any emulsifiers or system modifier, which is well known and conventional in the art of microencapsulation. Orr et al. (US 4,879,287 A) teaches that thickening agents maybe (1) natural products such as tragacanth, pectin or alginic acid or (2) synthetic or semi-synthetic compounds such as methylcellulose and carboxypolymethylene (CARBOPOL) (c. 3, l. 1-15). Orr serves to equate pectin (polygalacturonic acid methyl ester) and carboxypolymethylene (CARBOPOL) in the art. Stead et al. (US 5496891 A) discloses in the background that polyacrylic acid cross-linked with (poly)vinyl sucrose or (poly)vinyl pentaerythritol (also known as allyl sucrose and allyl pentaerythritol) have been sold since 1954 and are commercially available under the trademark CARBOPOL (c. 1, l. 7-18).

6. In light of the teachings of Orr that pectin (polygalacturonic acid methyl ester) and carboxypolymethylene (CARBOPOL) are known equivalents in the art of microencapsulation, one of ordinary skill in the art would have been motivated to substitute the exemplified

Art Unit: 1752

pectin of Polykarpov for a synthetic compound such as CARBOPOL which is a polyacrylic acid cross-linked with (poly)vinyl sucrose or (poly)vinyl pentaerythritol (also known as allyl sucrose and allyl pentaerythritol) and expect reasonably similar results.

Response to Amendment

7. Applicant's arguments, filed February 8, 2004, with respect to the rejection(s) of claim(s) 1-20 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of over Polykarpov et al. (US 6,080,530 A) in view of Orr et al. (US 4,879,287 A) and Stead et al. (US 5,496,891 A). Applicants successfully argue that the present application and the previously cited reference to Katampe (US 6620571 B2) were commonly owned at the time of invention. Thereby eliminating the cited prior art under 35 USC 103(c) based on the cited 35 USC 102(e) date. However, Polykarpov is applied under the statute of 35 USC 102(b) which is not overcome by a statement of common ownership.


Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvette C. Thornton whose telephone number is 571-272-1336. The examiner can normally be reached on Monday-Thursday 8-6:30.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1752

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Yvette Clarke Thornton
Patent Examiner
Art Unit 1752

yct
May 17, 2004